

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A tool management method executed by an intermediate apparatus coupled with a client system and a tool via a network, comprising the steps of:

receiving a first request from a the client system via the a network;

determining a first type of said first request based at least in part on using a first predetermined field contained in ~~a portion of~~ said first request; and

sending a first message to the a tool in response to said first request and said first type, wherein said first message is operable for controlling an action of said tool.

2. (Original) The method of claim 1 further comprising the step of determining an identification of a tool object corresponding to said tool using a second predetermined field in said portion of said request.

3. (Previously Canceled).

4. (Previously Amended) The method of claim 1 further comprising the steps of:

receiving a second message from said tool associated with said first action; and

caching said second message.

5. (Previously Amended) The method of claim 4 further comprising the steps of:

receiving a second request from said client system via said network;

retrieving said second message; and

generating a response to said second request using said second message.

6. (Previously Amended) The method of claim 5 further comprising the step of sending said response to said client system.

7. (Previously Canceled).

8. (Previously Amended) The method of claim 1 further comprising the steps of:

receiving a connection request from said client system; and

opening a connection to said client system, said connection being operable for

communicating requests and responses to said requests.

9. (Previously Amended) The method of claim 1 further comprising the steps of:

receiving a second request from said client system via said network, said second request selected from the group consisting of information requests, expand requests and edit requests, wherein,

in response to said information requests, an HTML page is generated using a set of selected data for a tool object corresponding to a managed tool for sending to said client system,

in response to said edit requests, an HTML page is generated having a portion operable for user entry of one or more values for modifying a tool object attribute for sending to said client system, and

in response to said expand requests an HTML page is generated using a set of child object names and relations to a parent object identified in said expand request for sending to said client system.

10. (Previously Amended) The method of claim 1 wherein said first type of said first request denotes an execute request.

11. (Original) The method of claim 1 wherein said step of sending said first message is in response to execution of a tool object method identified in said first request.

12. (Original) The method of claim 11 further comprising the step of overriding said tool object method.

13. (Original) The method of claim 12 wherein said step of overriding said tool object method comprises the steps of:

parsing a script source;

determining if said script source includes a method signature matching a method signature of said tool object method; and

if so, executing a corresponding portion of said script source.

14. (Previously Amended) The method of claim 1 wherein said first request is transferred in accordance with the hypertext transfer protocol (HTTP), and said portion corresponds to a

uniform resource locator (URL).

15. (Currently Amended) A data processing system comprising:

circuitry operable for receiving a first request from a client system via a network;

said circuitry operable for determining a first type of said first request based at least in part on using a first predetermined field contained in ~~a portion of~~ said first request; and

said circuitry operable for sending a first message to a tool in response to said first request and said first type, wherein said first message is operable for controlling an action of said tool.

16. (Original) The data processing system of claim 15 further comprising the circuitry for determining an identification of a tool object corresponding to said tool using a second predetermined field in said portion of said request.

17. (Previously Canceled).

18. (Previously Amended) The data processing system of claim 15 further comprising:

circuitry operable for receiving a second message from said tool associated with said first action; and

circuitry operable for caching said second message.

19. (Previously Amended) The data processing system of claim 18 further comprising:

circuitry operable for receiving a second request from said client system via said network;

circuitry operable for retrieving said second message; and

circuitry operable for generating a response to said second request using said second message.

20. (Previously Amended) The data processing system of claim 19 further comprising circuitry operable for sending said response to said client system.

21. (Previously Amended) The data processing system of claim 15 further comprising:

circuitry operable for receiving a connection request from said client system; and

circuitry operable for opening a connection to said client system, said connection being operable for communicating requests and responses to said requests.

22. (Previously Amended) The data processing system of claim 15 further comprising:

circuitry operable for receiving a second request from said client system via said network, said second request selected from the group consisting of information requests, expand requests and edit requests, wherein,

in response to said information requests, an HTML page is generated using a set of selected data for a tool object corresponding to a managed tool for sending to said client system,

in response to said edit requests, an HTML page is generated having a portion operable for user entry of one or more values for modifying a tool object attribute for sending to said client system, and

in response to said expand requests an HTML page is generated using a set of child object names and relations to a parent object identified in said expand request for sending to said client system.

23. (Previously Amended) The data processing system of claim 15 wherein said first type of said first request denotes an execute request.

24. (Original) The data processing system of claim 15 wherein said step of sending said first message is in response to execution of a tool object method identified in said first request.

25. (Original) The data processing system of claim 24 further comprising circuitry operable for overriding said tool object method.

26. (Original) The data processing system of claim 25 wherein said circuitry operable for overriding said tool object method comprises:

circuitry operable for parsing a script source;

circuitry operable for determining if said script source includes a method signature matching a method signature of said tool object method; and

circuitry operable for executing a corresponding portion of said script source, if so.

27-28. (Cancel)

29. (Previously Canceled).

30-38. (Cancel)

39. (Previously Amended) The method of claim 1 further comprising the steps of:

receiving a second request from said client system via said network; and

generating an HTML page using a set of selected data for a tool object corresponding to a managed tool for sending to said client system in response to said second request.

40. (Previously Amended) The method of claim 39 wherein said HTML page has a portion operable for user entry of one or more values for modifying a tool object attribute.

41. (Previously Amended) The data processing system of claim 15 further comprising:

circuitry operable for receiving a second request from said client system via said network; and

circuitry operable for generating an HTML page using a set of selected data for a tool object corresponding to a managed tool for sending to said client system in response to said second request.

42. (Previously Amended) The data processing system of claim 41 wherein said HTML page has a portion operable for user entry of one or more values for modifying a tool object attribute.

43-44. (Cancel)

45. (Previously Added) The data processing system of claim 15 wherein said first request is transferred in accordance with the hypertext transfer protocol (HTTP), and said portion corresponds to a uniform resource locator (URL).

46. (Previously Added) The program product of claim 27 wherein said first request is transferred in accordance with the hypertext transfer protocol (HTTP), and said portion corresponds to a uniform resource locator (URL).